

TECHNICAL ADVISORY COUNCIL
A Subcommittee of the Commission on Technology
Minutes
October 10, 2003

Members Present:

Mohyeddin Abdulaziz
John Barrett
Ron Beguin
Janet Cornell
David Davis
Daniel Edwards
John King
Cary Meister
Greg Obuch
Kyle Rimel
Will Tagart
Alan Turner

Members Not Present:

Joan Harphant
Karl Heckart
Carol Merfeld
Ellie Price

Others Present:

William Earl
Jennifer Gilbertson
Gary Graham
Maureen Haggerty
Jim Ham
Doreen Hamilton
Paul Hrisho
Robert Roll
Randy Smiley
David Stevens

INTRODUCTIONS

The meeting of the Technical Advisory Council on October 10, 2003 was called to order at 9:30 a.m. William Earl, AOC, chaired the meeting in the absence of Karl Heckart.

William presented the concept of and rationale for an enterprise architecture. Members discussed the various facets of an architecture and some of the current issues that may impact adoption of specific protocols and products.

Using a matrix of architecture layers, members identified the current and recommended future for each item. This matrix is attached as the proposed *Arizona Judicial Branch Enterprise Architecture Standards*.

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There was some discussion on the timing of adoption of these standards. Maricopa Court Superior noted that specific projects underway (iCIS development) or soon to be started (new JOLTS) had timing issues. The group agreed to address those specifics at a later time and to focus now on recommending the future development standard.

The architecture identifies current standards and the recommended standard for any new development or system migrations, while acknowledging the need to continue use of legacy products for continued maintenance of existing systems.

The Technical Advisory Council identified several standards that need to be identified and developed in this next fiscal year. They include 1) digital audio files; 2) change management processes (with tools/products as appropriate); and 3) electronic signatures. Where blanks appear in the architecture matrix, further work will be necessary over the next several years. The TAC will annually review and update the enterprise architecture.

ARIZONA JUDICIAL BRANCH

ENTERPRISE ARCHITECTURE STANDARDS

Rationale:

Adopting IT architecture, although intuitively a positive organizational direction, is often difficult. Standards are many times perceived as giving up freedom. However, with today's fast-paced technology demands, architecture is a strategic necessity. A mature IT enterprise must have the discipline to adopt and follow a consistent set of strategies, reference models and exchange capabilities.

- Per Gartner, the strategic goal of enterprise architecture is to position the [entity] to leverage technology in support of the business strategy and make technology the proactive enabler of an agile, responsive enterprise that can react in real time to changes in the marketplace, and take advantage of new business opportunities.
- Enterprise architecture will provide standardization and elimination of redundancy and complexity across the Arizona Judicial Branch.
- The cross-jurisdictional nature of criminal justice activities supports adopting common architectures to facilitate integration.
- The Judicial Branch should avoid being what Gartner Group describes as a “typical unarchitected e-government” where “multiple sets of customer channels, interfaces and systems are independently developed ... and require duplicative infrastructure and forced disparate access experiences for constituents.”
- There is a lower cost to buy and support a limited set of products and standards; the judiciary can leverage both volume discount buying and maintain a less complex environment.

Below is the recommended Enterprise Architecture Standard for the Arizona Judicial Branch. The standards, protocols and products listed are prescribed for core, leveraged activities and applications among the courts statewide. Where there are unique local undertakings that cannot be leveraged, a court is free to go beyond the standards set here. If sharable modules related to core applications are developed, then the standards should be followed. Non-standard products and applications are a challenge to support and can be a security concern. The “Distributed Component (Bolt-on) Module” (attached) documents the approaches to development of local, leveraged and standardized modules. To be sharable, supported in the statewide framework or part of core standardized applications, modules will be developed to the Enterprise Architecture Standard of the Arizona Judicial Branch.

An annual review of these standards by the Technical Advisory Council is recommended.

Architecture Layers	Baseline (currently in use)	Retirement (targeted for de-investment)	Containment (limited to maintenance & current commitments)	Mainstream FUTURE (primary option for new systems or legacy migration)	Watchlist: Emerging Technologies (to be evaluated for future inclusion)	Comments
Applications & Tools						
User Interface delivery method	Web Non-web			Web & Non Web		
Electronic Document Management	Hyland OnBase			Hyland OnBase		
Document Imaging	Kofax; other systems pre-2003 RFP			Kofax		
Report Writer	Crystal Enterprise			Crystal Enterprise		Under consideration: Brio; Native Application Report Writers (e.g. PowerBuilder)

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Development Environment	Visual Interdev, Visual Studio, PowerBuilder, Panther, Traditional 3GL	Panther, COBOL	Visual Interdev, Visual Studio, PowerBuilder	.NET, Selected Traditional 3GL (on a business case need basis)		
Source Control	PCVS, Visual Source Safe, CCC Harvest (Phx.), Aldon (JOLTS), SCCS (DW)					Need a process to meet requirements, not a specified tool. FY2004 TAC assignment to develop a change management process.
Word Processing	Word Perfect, Word	Word Perfect		Word		

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Email	SMTP standards as defined by RFC 821 and the MIME standards, as defined by RFC 1521 and RFC 1522,			SMTP standards as defined by RFC 821 and the MIME standards, as defined by RFC 1521 and RFC 1522,		
Data Architecture						
DBMS	Informix, DB2, SQL Server	Informix	DB2(?)	SQL Server, DB2(?)		
Data Warehouse DBMS	Informix XPS			Informix XPS		
DBMS Modeling Tools	PowerDesigner Erwin, Visio					Tools must be capable of creating alter scripts to update database schemas.
Data Exchange Model	JXDD 3.0.0.1			JXDD 3.0.0.1		

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Document format	Tagged Image File Format (TIF), Portable Document Format (PDF)			Tagged Image File Format (TIF), Portable Document Format (PDF)	XML	
Audio File Format	Proprietary formats, uncompressed WAV			Need to adopt this format for FY 2004		
Video File Format	Proprietary formats					
Data Encryption	Triple Data Encryption Standard (Triple DES)			Triple Data Encryption Standard (Triple DES)		For data encryption over public networks
Stored Data Encryption						

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Networks and Platforms						
Network Protocol	Transmission Control Protocol/ /Internet Protocol (TCP/IP) as defined in RFC 793 and RFC 791.			Transmission Control Protocol/ /Internet Protocol (TCP/IP) as defined in RFC 793 and RFC 791.		
Client Operating System	Local option where there is local support else Windows 2000					
Server Operating Systems	Microsoft Windows, UNIX			Microsoft Windows, UNIX	Linux	
Database Server Operating System	UNIX, Windows 2000, Windows Datacenter					

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Shared Services						
Component Service Layer	DCOM, ASP, SOAP			Microsoft's Enterprise Services	Web Services	
Directory Services						
Electronic Signatures	NONE: To be addressed in 2004					
Identity Authentication						
Message Transport Middleware						
Message Transport	MQ			MQ		
Data Transformation	MQSI, Data Junction		Data Junction	MQSI		
Data Routing/Publish and Subscribe	MQSI			MQSI		

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File Transfer	FTP		FTP	MQ		Note: We'd have to buy an add-in for MQ to do FTP through it.

The Technical Advisory Council will develop an Exception Process and recommend it for adoption by the Judicial Branch along with the Enterprise Architecture.

Exception Process Principles:

1. A business case can justify alternative choices. This includes introducing new technologies that are not listed here.
2. Local and statewide impacts must be considered in the impact analysis.
3. These standards apply to core applications.
4. Enterprise leveraging is the key business driver for adoption of this architecture.
5. National and industry standards will be considered in any impact analysis.